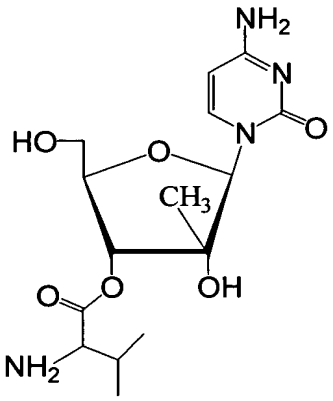
We claim:

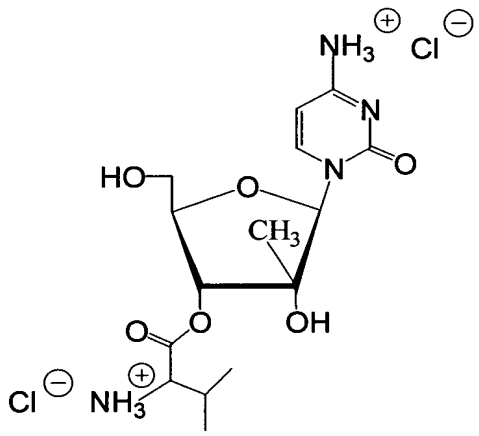
1. A compound of Formula (I) or a pharmaceutically acceptable salt thereof:



Formula (I)

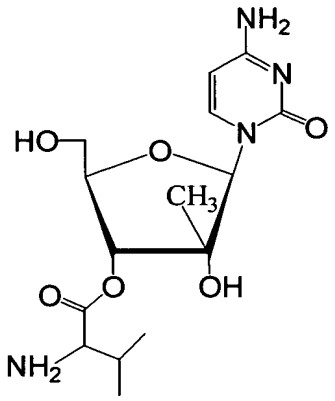
2. The compound of claim 1, wherein the pharmaceutically acceptable salt is a hydrochloride salt.

3. The compound of claim 1, wherein the pharmaceutically acceptable salt is the dihydrochloride salt of Formula (II).



Formula (II)

4. A pharmaceutical composition comprising an effective amount of the compound of Formula (I) or a pharmaceutically acceptable salt thereof to treat a *Flaviviridae* infection, in a pharmaceutically acceptable carrier.



Formula (I)

5. The pharmaceutical composition of claim 4 wherein the pharmaceutically acceptable salt is a hydrochloride salt.

6. The pharmaceutical composition of claim 4 wherein the pharmaceutically acceptable salt is a dihydrochloride salt.

7. The pharmaceutical composition of claim 4, whrein the pharmaceutically acceptable carrier is suitable for oral delivery.

8. The pharmaceutical composition of claim 4, further comprising a second antiviral agent.

9. The pharmaceutical composition of claim 8, wherein the second anti-viral agent is selected from the group consisting of an interferon, ribavirin, interleukin, NS3 protease inhibitor, cysteine protease inhibitor, phenanthrenequinone, thiazolidine derivative, thiazolidine, benzanilide, a helicase inhibitor, a polymerase inhibitor, nucleotide analogue, gliotoxin, cerulenin, antisense phosphorothioate oligodeoxynucleotides, inhibitors of IRES-dependent translation, and a ribozyme.

10. The pharmaceutical composition of claim 8, wherein the second agent is an interferon.

11. The pharmaceutical composition of claim 8, wherein the second agent is selected from the group consisting of pegylated interferon alpha 2a, interferon alphacon-1, natural interferon, albuferon, interferon beta-1a, omega interferon, interferon alpha, interferon gamma, interferon tau, interferon delta and interferon gamma- 1b.

12. The pharmaceutical composition of claim 8, wherein the second agent is interferon alpha 2.

13. The pharmaceutical composition of claim 4, wherein the compound is in the form of a dosage unit.

14. The composition of claim 13, wherein the dosage unit contains .01 to 50 mg of the compound.

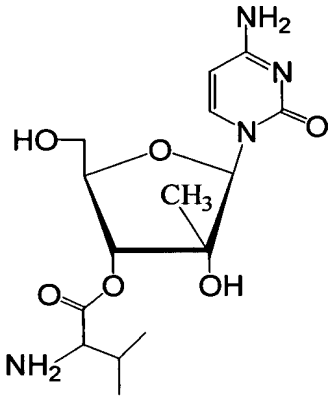
15. The composition of claim 13, wherein said dosage unit is a tablet or capsule.

16. The composition of claim 4, wherein the compound is in substantially pure form.

17. The compound of claims 1-3, wherein the compound is at least 90% by weight of the β-D-isomer.

18. The compoound of claims 1-3, wherein the compound is at least 95% by weight of the β-D-isomer.

19. A method of treating a host infected with a flavivirus or pestivirus, comprising administering to a host in need thereof an effective amount of a compound having the structure of Formula (I) or a pharmaceutically acceptable salt or prodrug thereof optionally in a pharmaceutically acceptable carrier.



Formula (I)

20. The method according to claim 19, wherein the pharmaceutically acceptable salt is a hydrochloride salt.

21. The method according to claim 19, wherein the pharmaceutically acceptable salt is a dihydrochloride salt.

22. The method according to claim 19, further comprising administering the compound in a pharmaceutically acceptable carrier, diluent or excipient.

23. The method according to claim 19, wherein the compound is administered in combination or alternation with a second anti-viral agent.

24. The method according to claim 23, wherein the second antiviral agent is selected from the group consisting of interferon, ribavirin, interleukin, an NS3 protease inhibitor, cysteine protease inhibitor, thiazolidine derivative, thiazolidine, benzanilide, phenan-threnequinone, a helicase inhibitor, a polymerase inhibitor, a nucleotide analogue, gliotoxin, cerulenin, antisense phosphorothioate oligodeoxynucleotides, inhibitor of IRES-dependent translation, and a ribozyme.

25. The method according to claim 23, wherein the second antiviral agent is an interferon.

26. The method according to claim 19, wherein the second antiviral agent is selected from the group consisting of pegylated interferon alpha 2a, interferon alphacon-1, natural interferon, albuferon, interferon beta-1a, omega interferon, interferon alpha, interferon gamma, interferon tau, interferon delta and interferon gamma- 1b.

27. The method of claim 26, wherein the second antiviral agent is interferon alpha 2.

28. The method of claim 19, wherein the host is a human.

29. The method of claim 19, wherein the compound is in the form of a dosage unit.

30. The method of claim 29, wherein the dosage unit contains 10 to 500 mg of the compound.

31. The method of claim 29, wherein said dosage unit is a tablet or capsule.

32. The method of claim 19, wherein the pharmaceutically acceptable carrier is suitable for oral or intravenous delivery.

33. The method of claim 19, wherein the compound is in administered in substantially pure form.

34. The method of claim 19, wherein the compound is at least 90% by weight of the β-D-isomer.

35. The method of claim 19, wherein the compound is at least 95% by weight of the β-D-isomer.

36. The method of claim 19, wherein the virus is HCV.

37. A compound of Formula I or II, wherein the 5'-hydroxyl group is replaced with a 5'-OR, wherein R is phosphate; a stabilized phosphate prodrug; acyl; alkyl; sulfonate ester including alkyl or arylalkyl sulfonyl including methanesulfonyl and benzyl, wherein the phenyl group is optionally substituted; a lipid; an amino acid; a carbohydrate; a peptide; cholesterol; or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R is independently H or phosphate.

38. A pharmaceutical composition that comprises the compound of Formula I or II in a pharmaceutically acceptable carrier, wherein the 5'-hydroxyl group is replaced with a 5'-OR, wherein R is phosphate; a stabilized phosphate prodrug; acyl; alkyl; sulfonate ester including alkyl or arylalkyl sulfonyl including methanesulfonyl and; benzyl, wherein the phenyl group is optionally substituted; a lipid, an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R is independently H or phosphate.

39. A method for treating a host infected with an RNA-dependant RNA polymerase virus, comprising administering an effective amount of the compound of Formula I or II in a pharmaceutically acceptable carrier, wherein the 5'-hydroxyl group is replaced with a 5'-OR, wherein R is hydrogen, phosphate; a stabilized phosphate prodrug; acyl; alkyl; sulfonate ester including alkyl or arylalkyl sulfonyl including methanesulfonyl and; benzyl, wherein the phenyl group is optionally substituted; a lipid, an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R is independently H or phosphate.

40. The method of claim 39 wherein the virus is a *Flaviviridae* virus.

41. The method of claim 39 or 40 wherein the *Flaviviridae* virus is hepatitis C.

42. The method of Claims 39, 40 or 41 wherein the host is human.

43. The compound of claim 1, wherein the pharmaceutically acceptable salt is selected from tosylate, methanesulfonate, acetate, citrate, malonate, tartarate, succinate, benzoate, ascorbate, α-ketoglutarate, and α-glycerophosphate, formate, fumarate, propionate, glycolate, lactate, pyruvate, oxalate, maleate, salicyate, sulfate, sulfonate, nitrate, bicarbonate, hydrobromate, hydrobromide, hydroiodide, carbonate, and phosphoric acid salts.

44. The composition of claim 4, wherein the pharmaceutically acceptable salt is selected from tosylate, methanesulfonate, acetate, citrate, malonate, tartarate, succinate, benzoate, ascorbate, α-ketoglutarate, and α-glycerophosphate, formate, fumarate, propionate, glycolate, lactate, pyruvate, oxalate, maleate, salicyate, sulfate, sulfonate, nitrate, bicarbonate, hydrobromate, hydrobromide, hydroiodide, carbonate, and phosphoric acid salts.

45. The method of claim 19, wherein the pharmaceutically acceptable salt is selected from tosylate, methanesulfonate, acetate, citrate, malonate, tartarate, succinate, benzoate, ascorbate, α-ketoglutarate, and α-glycerophosphate, formate, fumarate, propionate, glycolate, lactate, pyruvate, oxalate, maleate, salicyate, sulfate, sulfonate, nitrate, bicarbonate, hydrobromate, hydrobromide, hydroiodide, carbonate, and phosphoric acid salts.